

FACT SHEET
FOR
STATE WASTE DISCHARGE PERMIT No. ST-6204
FACILITY NAME: Ocean Protein, LLC

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INTRODUCTION

This fact sheet is a companion document to the draft State Waste Discharge Permit No. ST-6204. The Department of Ecology (the Department) is proposing to modify this temporary permit to allow discharge of Ocean Protein's wastewater into the wastewater treatment system of Grays Harbor Paper, L.P. (GHP), 801 23rd Street, Hoquiam, Washington, instead of resuming discharge to the wastewater treatment system designed for the City of Hoquiam. This fact sheet explains the nature of the proposed discharge, the Department's decisions to limit the pollutants in the wastewater discharged, and the regulatory and technical bases for those decisions.

Washington State laws (RCW 90.48.080 and section .160) require that a facility operator obtain a wastewater discharge permit from the Department before discharging waste to waters of the state. This chapter of the statute applies to commercial or industrial discharges to sewerage systems operated by municipalities, or to public entities that discharge into public waters of the state. Regulations adopted by the state include procedures for issuing permits and establish requirements which are to be included in the permit (Chapter 173-216 WAC).

This Fact Sheet and draft permit are available for review by any interested person, as described in Appendix A—Public Involvement Information.

The Fact Sheet and draft permit were reviewed by the Permittee for factual accuracy. Ecology corrected any errors or omissions identified in the review before sending Public Notice of the proposed permit. After the public comment period closes, the Department will summarize the substantive comments and Ecology's responses to them. The Summary and Response to Comments will become part of the legal record on the permit; anyone who submits a comment will receive a copy of the Department's response. The Fact Sheet will not be revised. But any changes from the draft to the final permit will be explained in Appendix C—Response to Comments.

GENERAL INFORMATION	
Applicant	Ocean Protein, LLC
Facility Name and Address	Ocean Protein, LLC, PO Box 696, Hoquiam, WA 98550
Type of Facility	Fish Waste Processing Plant
Contact at Facility	Name: Aaron Dierks Telephone: (360) 538-7400
Responsible Official	Name: Aaron Dierks Title: General Manager Address: P.O. Box 696 518 22 nd Street Hoquiam, WA 98550 Telephone: (360) 538-7400 FAX: (360) 835-7272
Discharge Location	Latitude: 46° 58' 03" N Longitude: 123° 51' 45" W
Treatment Plant Receiving Discharge	Grays Harbor Paper, L.P. 801 23 rd Street Hoquiam, WA 98550

BACKGROUND INFORMATION

DESCRIPTION OF THE FACILITY

HISTORY

The proposed permit allows Ocean Protein (OP) to discharge wastewater generated from its fishmeal plant to Grays Harbor Paper's (GHP) sewer system, on the former site of the Rayonier, Inc. (Rayonier) pulp mill. The area where the OP fish waste processing facility is located was Rayonier's Vanillin plant. The Vanillin plant processed Rayonier's spent sulfite liquor into vanilla and it discharged wastewater to the Rayonier sewer via an overhead force pipe, where it mixed with wastewater from the pulp and paper mill. The system pumped the combined wastewater into an activated sludge wastewater treatment system. After the pulp mill shut down in 1992, an investment group started GHP to operate the paper mill portion.

Rayonier's activated sludge wastewater treatment system was designed to treat the wastewater from the pulp mill, the paper mill, and the vanillin plant. The system design includes capacity to treat 170,000 pounds of biochemical oxygen demand (BOD) daily, with a flow of 30 million gallons per day (MGD).

Ocean Protein's existing temporary permit (ST-6204) allows OP to discharge low strength wastewater into the City of Hoquiam's wastewater treatment system. The proposed permit modification would allow OP to discharge all streams except its "press water" to the GHP treatment system. "Press water" is the name for wastewater collected after the fish has been cooked and pressed, separating solids from liquids. OP's process usually evaporates the press water and adds it back to the fish-meal line before drying.

Two main reasons for changing OP's discharge location are:

- (1) GHP's wastewater treatment system can handle larger flows and higher ammonia loads than the City of Hoquiam's system. Given that greater capacity, air pollution control scrubbers can be operated at higher flow rates, thereby producing cleaner exhaust gases than OP could do when discharging into the City of Hoquiam's system. Thus, less odor will emit from the OP site. Also, streams with high ammonia could not be discharged into the City of Hoquiam's system, but the GHP system can treat ammonia so long as loading to the system is stable. (OP's untreated press water would not be allowed into GHP's treatment system because of the press water's potential to cause an excess load of ammonia.)
- (2) The GHP wastewater treatment system has unused capacity, while the City of Hoquiam's system is over loaded.

INDUSTRIAL PROCESSES

The Ocean Protein plant uses primarily Pacific whiting and sardine wastes supplied by fish processing plants. OP processes those wastes into fish meal, fish bone, and fish oil products. The OP plant has two separate lines that operate only during the season for these fish species - beginning in May and ending in early October. During this time OP's plant will be discharging wastewater generated from processing the fish "offal" (the residual parts left from initial fish processing). The offal arrives at OP's site in end-dump trailers that unload into the receiving bin located in the main plant. The waste is transferred into one or two fish storage tanks that feed the

offal into steam cookers. Steam cooking coagulates the solids and allows separation of the solids from the liquid. During the cooking process fat cells rupture and the resulting oil collects with the other liquid phase. The solids and liquids are separated by a screw press. The solids are called “press cake.” The liquid is called “press water.” OP dries the press cakes from about 50 percent moisture to about 5 to 10 percent. The solids are milled and screened after drying to separate the fish meal from the bones, which are packaged separately and sold as distinct products. The press water is routed to a tricanter, where a three-phase centrifuge removes solids. The solids are sent back to the fish meal line. But the liquid is separated into oils and water. The oils are packaged and sold as a commercial product.

A stickwater evaporation and pumping process enables the plant to capture additional solids and oils. Evaporators use heat from the dryer exhaust to concentrate the water portion, commonly called “stickwater.” The system pumps stickwater from the bottom of the first evaporator to the top of the second, then pumps stickwater from the bottom of the second evaporator into the top of the third. Vacuum pumps lower the boiling point of the stickwater for faster processing. The final evaporator discharges the thickened stickwater into the fish meal processing line before sending the meal into a dryer.

Under this permit modification the remaining vapor condensates will ultimately discharge to the GHP wastewater treatment system, mixing with the other wastewater, via an overhead line. After GHP took over the facility the new operators removed the line (a stainless steel pipe) that had been in service from the vanillin plant to the Rayonier wastewater treatment system, but GHP will re-install the line to transport OP’s wastewater. The proposed permit will not allow OP’s untreated press water to discharge into the GHP system. Instead, the press water will be handled as described above, unless the evaporators are down. During evaporator down time OP must collect, isolate, and find another method of treatment for its press water.

TREATMENT PROCESSES

The wastewater treatment system could take occasional high loading of BOD when the pulp mill was operating because the mixed liquor suspended solids (MLSS) were held in the range of 1,800 ppm (\pm). Operation at the concentration of MLSS yields a large biomass in the secondary treatment system, with a corresponding oxygen level that provides a large cushion for BOD loading. The MLSS of the present system with the GHP BOD loading of 4,400 to 6,000 lbs/day BOD keeps MLSS levels in the few hundred parts per million range, i.e. 100-200 parts per million (ppm). But Ecology questions whether the system could withstand so large a shock load - particularly with respect to BOD, fish oils, and ammonia-like compounds - that would occur if OP discharged untreated press water into the system.

At present the Grays Harbor Paper wastewater treatment system handles a flow of 5 to 15 MGD with little nitrogenous compounding. CH2M Hill engineering company performed a study to determine how the GHP treatment system would react to Ocean Protein’s discharge. The study concluded the BOD and ammonia discharged into the GHP treatment system from the OP system would be effectively treated only if the dissolved oxygen content of the aeration basin was held between 3 and 4 ppm and if press water was not discharged into the treatment system. Sometimes the processing evaporators go down and OP can’t capture the oils and solids. If the evaporators fail, OP is not allowed to discharge its press water into GHP’s treatment system.

The modified GHP permit will contain a best management plan (BMP) that describes operation of the aeration basin blower system to maintain a dissolved oxygen level between 3 and 4 ppm at all times. The prescribed dissolved oxygen level would induce nitrification of the ammonia- and nitrogen-containing compounds, according to CH2M Hill engineering analysis (conducted at GHP's request).

GHP currently operates a Turblex blower at about 50 percent capacity, aerating the basin in zones. If more air is needed to maintain the desired oxygen level, GHP has the ability to increase the capacity of the Turbex blower to full or near 100 percent, or to operate another backup blower (a large Hoffman blower, capable of supplying additional air). GHP could also recirculate secondary effluent through the primary clarifier, to reduce the anaerobic conditions that could otherwise develop in the primary clarifier and cause odor when OP's wastewater is introduced into the treatment system. According to the CH2M Hill engineering report, the GHP treatment system is capable of treating OP's wastewater to an acceptable level so long as no press water is introduced.

Throughout February and early March this year, GHP ran a pilot wastewater treatment plant to test how its regular wastewater treatment system would handle the OP wastewater. The test used OP's wastewater from the past season because OP's processing plant was then shut down. The pilot treatment plant consisted of primary and secondary treatment units. Each unit was a 300 gallon heated insulated tote bin. The wastewater flows from the GHP and the OP processes were proportioned to mimic the loads on GHP's wastewater treatment system when treating both facilities' wastewater. The test runs measured both ammonia and Total Kjeldahl Nitrogen (TKN) in effluent from the primary treatment unit and in effluent from the secondary treatment unit.

Those tests showed no metals in OP's effluent. And test data collected from February 10, 2006 to March 2, 2006 showed a reduction of ammonia ranging between 96.4 and 98.8 percent, and a reduction of TKN ranging between 47.4 and 72.2 percent. These data confirmed the CH2M Hill conclusions that the GHP's wastewater treatment system would remove almost all the ammonia. BOD is not an issue since the mill wastewater treatment system is under-loaded for BOD. Nor is TSS a problem because the GHP treatment system uses primary treatment followed by a secondary activated sludge treatment with secondary clarification. Ecology therefore placed no limits in the proposed permit for either BOD or TSS.

PERMIT STATUS

Ecology issued a temporary state waste discharge permit (No. 6204) to Ocean Protein for this facility on September 23, 2005. The permit allowed OP to discharge all streams except high strength wastewater from the first evaporator stage, referred to as "dryer condensate." OP last discharged into the City of Hoquiam wastewater treatment system three days before its seasonal shutdown.

Ecology received an application for a modified state waste discharge permit on March 6, 2006 and the Department deemed it complete and accepted the application on March 8, 2006.

Ecology will modify OP's temporary permit to allow all streams to be discharged into the GHP's wastewater treatment system except press water. Discharging the OP press water into GHP's wastewater treatment system could overload it with ammonia-like compounds, over the short term, causing odorous emissions. Under the proposed permit OP's press water must be isolated and contained, and treated or disposed by another method. Under the modified permit the

Fact Sheet for State Waste Discharge Permit No. ST-6204 for OCEAN PROTEIN, L.L.C. - Mod. 1
sanitary wastewater from OP will route to the City of Hoquiam sewer system and through the
city's wastewater treatment system.

The proposed permit modification is conditioned on OP refraining from discharging any process
wastewater into the City of Hoquiam sewer line. The proposed permit requires disconnection of
the discharge line carrying process wastewater to the City of Hoquiam. The proposed permit
authorizes Ocean Protein to discharge into GHP's wastewater treatment system sewer for all
process wastewater except raw press water. This authorization does not include spills.

OP and GHP agreed that GHP will perform the monitoring required by the state waste discharge
permit. GHP will therefore monitor flow, BOD₅, TSS, ammonia, oil and grease, and TKN to
characterize all wastewater OP discharges into GHP's wastewater treatment system.

SUMMARY OF COMPLIANCE WITH THE PREVIOUS PERMIT

A pending enforcement action by the federal Environmental Protection Agency alleges OP
released un-permitted discharges. Ecology will place a condition in the permit requiring the
Permittee to find and use an acceptable method of treatment and/or disposal of the raw "press
water" produced while the evaporator is down.

WASTEWATER CHARACTERIZATION

The mass of pollutants in the discharge was reported in the engineering report submitted with the
application. The average proposed wastewater discharge is characterized for the following
parameters:

Parameter	Pounds per day
BOD ₅	1,173
TSS	39
Ammonia as N	402
Total Kjeldahl Nitrogen (TKN)	783
Oil and grease	12

SEPA COMPLIANCE

No filing or reports are required by the State Environmental Policy Act (SEPA) for this permit.

PROPOSED PERMIT LIMITATIONS

State regulations require limitations set forth in a waste discharge permit to be based either on
the technology available to treat the pollutants (technology-based) or on the effects of the
pollutants to the receiving wastewater treatment system (water quality criteria), whichever is
more stringent. Wastewater must be treated using all known, available, and reasonable treatment
(AKART), and OP's wastewater must not interfere with operation of GHP's receiving
wastewater treatment system.

The minimum requirements to demonstrate compliance with the AKART standard and specific
design criteria for Grays Harbor Paper's facility were determined in the engineering report

“Evaluation of GHP Secondary Treatment System to Accept Ocean Protein, LLC Wastewater” compiled by CH2M Hill, dated December 30, 2005. GHP’s application to modify its NPDES permit indicated that the projected flows and loads would increase, because of the redesign of the facility’s air pollution control scrubbers. Concurring with CH2M Hill, Grays Harbor Paper submitted a letter with its NPDES permit application stating that the GHP wastewater treatment system could adequately treat the increased load of ammonia from OP’s wastewater. At worst, GHP may have to operate the Hoffman blower during peak loads.

TECHNOLOGY-BASED EFFLUENT LIMITATIONS

All waste discharge permits issued by the Department must specify conditions requiring available and reasonable methods of prevention, control, and treatment of discharges to waters of the state (WAC 173-216-110). The following permit limitation is necessary to satisfy the requirement for AKART:

The proposed permit prohibits discharge of untreated press water into Grays Harbor Paper’s wastewater treatment system. The press water must be isolated and contained. This wastewater must be treated and disposed by other means.

EFFLUENT LIMITATIONS BASED ON LOCAL LIMITS

Pollutant concentrations in the proposed discharge with technology-based controls in place will not cause problems at the receiving GHP such as interference, pass-through or hazardous exposure to GHP workers nor will it result in unacceptable pollutant levels in the GHP’s sludge.

COMPARE PROPOSED LIMITATIONS WITH THE EXISTING TEMPORARY PERMIT ISSUED SEPTEMBER 23, 2005

	Existing Limits	Proposed Limits
pH	6 - 10 SU	5 – 9 SU
CBOD ₅	86 lbs/day	None
BOD ₅	None	None
Total Ammonia as N	19 lbs/day	Ave 400 lbs/day Max 750 lbs/day
Total Kjeldahl N	23 lbs/day	None
Total Dissolved Solids	300 lbs/day	None
Total Suspended Solid (TSS)	None	None
Oil & Grease	None	Ave 9 lbs/day Max 19 lbs/day

Under the proposed permit modification, OP will discharge into a different treatment system. GHP’s receiving wastewater treatment system can sufficiently treat the BOD and TSS loadings;

its wastewater treatment system has a deficiency of ammonia. The City of Hoquiam wastewater treatment system lacked capacity to treat ammonia, flow, BOD, and TSS, while GHP has the capacity for these loads. No pretreatment standards exist for industry-to-industry discharge.

MONITORING REQUIREMENTS

Monitoring, recording, and reporting are specified to verify that the treatment process is functioning correctly, and that effluent limitations are being achieved (WAC 173-216-110).

The monitoring schedule is detailed in the proposed permit under Condition S2. The GHP permit will require that GHP monitor the OP wastewater discharge for flow, TKN, CBOD, oil and grease, and ammonia. OP may use the monitoring data generated by GHP to satisfy their monitoring requirements. Specified monitoring frequencies take into account the quantity and variability of the discharge, the treatment method, past compliance, significance of pollutants, and cost of monitoring.

OTHER PERMIT CONDITIONS

REPORTING AND RECORDKEEPING

The S3 Conditions are based on Ecology's duty to specify appropriate reporting and record-keeping requirements to prevent and control waste discharges (WAC 173-216-110).

OPERATIONS AND MAINTENANCE

The proposed state permit contains condition S5 to ensure proper operation and maintenance as described under WAC 173-240-150 and WAC 173-216-110. Ocean Protein's maintenance at its fish meal operation is critical to proper loading of GHP's wastewater treatment system. The proposed state waste discharge permit therefore requires proper operation and maintenance of the OP plant.

PROHIBITED DISCHARGES

Certain pollutants are prohibited from discharge to GHP's wastewater treatment system. These prohibited pollutants include: substances which cause pass-through or interference, pollutants which may damage the wastewater treatment system or may harm the wastewater workers, and designated dangerous wastes not authorized by this permit (Chapter 173-303 WAC).

DILUTION PROHIBITED

The Permittee is prohibited from diluting its effluent as a partial or complete substitute for adequate treatment to achieve compliance with permit limitations.

SOLID WASTE PLAN

The Department determined that OP's facility and operations pose a potential to cause pollution of the waters of the state from solid waste leachate. This proposed permit requires, under authority of RCW 90.48.080, that the Permittee develop and submit to the Department a solid waste plan to prevent the OP plant's solid waste from causing pollution of waters of the state.

Occasionally this facility may generate wastewater which is not characterized in the permit application because the discharge is neither routine nor anticipated at the time of application. These typically are waters used to pressure-test storage tanks or fire water systems, or leaks from drinking water systems. Typically clean, the wastewaters may be contaminated with pollutants.

The proposed permit includes authorization for non-routine and unanticipated discharges. The permit requires OP to characterize these wastewaters for pollutants and to examine opportunities for reuse. Depending on the nature and extent of pollutants identified in this wastewater, and on reasonable opportunities for reuse, Ecology may authorize OP's direct discharge to the GHP treatment system (with GHP's consent) or require OP to reuse the water.

SPILL PLAN

The Department determined that Ocean Protein stores on-site a quantity of chemicals that have potential to cause water pollution if accidentally released. The Department has the authority to require the Permittee to develop Best Management Plans to prevent an accidental release. [See section 402(a) (1) of the Federal Water Pollution Control Act (FWPCA), and RCW 90.48.080.] The proposed permit requires the Permittee to develop and implement a plan for preventing the accidental release of pollutants to state waters and for minimizing damages if such a spill occurs.

SLUG DISCHARGE CONTROL PLAN

The Department determined that Ocean Protein's facility and operations have the potential for a batch discharge or a spill that could adversely effect GHP's treatment system. Federal and state laws therefore require OP to write a slug discharge control plan (40 CFR 403.8 (f)).

GENERAL CONDITIONS

General Conditions are based directly on state laws and regulations and have been standardized for all industrial waste discharge to wastewater treatment systems. This standardization lends predictability and ensures fairness for seekers of permits issued by the Department.

Condition G1 requires responsible officials or their designated representatives to sign submittals to the Department. Condition G2 requires the Permittee to allow the Department to access records about the treatment system, the production facility, and records related to the permit. Condition G3 specifies conditions for modifying, suspending, or terminating the permit. Condition G4 requires the Permittee to apply to the Department prior to increasing or varying the discharge from the levels stated in the permit application. Condition G5 requires the Permittee to construct, modify, and operate the permitted facility in accordance with approved engineering documents. Condition G6 prohibits the Permittee from using the permit as a basis for violating any laws, statutes or regulations. Conditions G7 and G8 relate to permit renewal and transfer. Condition G9 requires the Permittee to control production or wastewater discharge in order to maintain compliance with the permit. Condition G10 prohibits the reintroduction of removed pollutants into the effluent stream for discharge. Condition G11 requires the payment of permit fees. Condition G12 describes the penalties for violating permit conditions.

RECOMMENDATION FOR PERMIT ISSUANCE

This proposed permit meets all statutory requirements for authorizing a wastewater discharge, including those limitations and conditions believed necessary to control toxics. The Department proposes that the permit be issued for 5 years.

REFERENCES FOR TEXT AND APPENDICES

Washington State Department of Ecology.

Laws and Regulations (<http://www.ecy.wa.gov/laws-rules/index.html>)

Permit and Wastewater Related Information

(<http://www.ecy.wa.gov/programs/wq/wastewater/index.html>)

APPENDICES

APPENDIX A—PUBLIC INVOLVEMENT INFORMATION

The Department proposes to issue a permit modification to Ocean Protein, LLC. The permit contains conditions and effluent limitations as described in the rest of this fact sheet.

The Department published a Public Notice describing our proposal on March 29, 2006, in Aberdeen's newspaper *The Daily World*. Ecology also sent a Notice by postal and by electronic mail to a list of interested persons. The Notice announced that copies of the draft state permit and explanatory fact sheet were available for local review at either the Aberdeen or the Hoquiam branches of the Timberline Public Libraries system. The Notice asked interested persons to read the documents and send written comments about the proposed permit modification. The draft permit, fact sheet, and related documents were available for inspection and copying between the hours of 8:00 a.m. and 5:00 p.m. weekdays, by appointment, at the Industrial Section office in Ecology's headquarters building located in Lacey, Washington.

We asked people to mail written comments to:

Don Nelson
Industrial Section
Department of Ecology
PO Box 47600
Olympia, WA 98504-7600

Anyone could comment on the draft permit modification, or could request a public hearing about it, within the thirty (30) day comment period. Any request for a hearing must have described the requestor's interest in the permit and explained why the hearing is warranted. The Department would schedule a hearing if it determined a significant public interest in the draft permit (WAC 173-216-100). Ecology would circulate a Public Notice advertising any such hearing at least thirty (30) days in advance of the hearing date. People who expressed an interest in this permit will receive an individual Notice of Hearing.

Effective comments should refer to specific text, should explain the writer's concern about the effects of giving legal weight to the text, and should propose a modification to address the concern when possible. Comments may address technical issues, accuracy and completeness of information, the scope of the facility's proposed coverage, adequacy of environmental protection, permit conditions, or any other concern that would result from issuance of this permit. You may view the draft permit and factsheet on our website:
<http://apps.ecy.wa.gov/industrial/proposed.asp>.

The Department promised to weigh the merits of all comments received within thirty (30) days from the date of Public Notice shown above, in formulating a final decision about the permit. The Department of Ecology's response to all significant comments will be published and mailed directly to people who expressed an interest in this permit. A copy will also be sent upon request.

This permit was written by Don Nelson. For further information about it, phone him at (360) 407-6940, or write to him at the postal the address listed above.

APPENDIX B—GLOSSARY

Ammonia—Ammonia is produced by the breakdown of nitrogenous materials in wastewater. Ammonia is toxic to aquatic organisms, exerts an oxygen demand, and contributes to eutrophication. It also increases the amount of chlorine needed to disinfect wastewater.

Average Monthly Discharge Limitation—The average of the measured values obtained over a calendar month's time.

Best Management Practices (BMPs)—Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the State. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

BOD₅—Determining the Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of organic material present in an effluent that is utilized by bacteria. The BOD₅ is used in modeling to measure the reduction of dissolved oxygen in receiving water after effluent is discharged. Stress caused by reduced dissolved oxygen levels makes organisms less competitive and less able to sustain their species in the aquatic environment. Although BOD is not a specific compound, it is defined as a conventional pollutant by the federal Clean Water Act.

Bypass—The intentional diversion of waste streams from any portion of the collection or treatment facility.

Compliance Inspection - Without Sampling—A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations.

Compliance Inspection - With Sampling—A site visit to accomplish the purpose of a Compliance Inspection - Without Sampling (defined above) as well as sampling and analysis for all parameters with limits in the permit, to ascertain compliance with those limits; and, for municipal facilities, sampling of influent to ascertain compliance with the 85 percent removal requirement. Additional sampling may be conducted.

Composite Sample—A mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. Maybe “time-composite”(collected at constant time intervals) or “flow-proportional” (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increased while maintaining a constant time interval between the aliquots).

Construction Activity—Clearing, grading, excavation and any other activity which disturbs the surface of the land. Such activities may include road building, construction of residential houses, office buildings, or industrial buildings, and demolition activity.

Continuous Monitoring—Uninterrupted, unless otherwise noted in the permit.

Engineering Report—A document, signed by a professional licensed engineer, which thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater facility. The report shall contain the appropriate information required in WAC 173-240-060 or WAC 173-240-130.

Grab Sample—A single sample or measurement taken at a specific time or over as short period of time as is feasible.

Industrial Wastewater—Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business, from the development of any natural resource, or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated storm water and, also, leachate from solid waste facilities.

Interference— A discharge which, alone or in conjunction with a discharge or discharges from other sources, both:

Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal and;

Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to subtitle D of the SWDA), sludge regulations appearing in 40 CFR Part 507, the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

Maximum Daily Discharge Limitation—The highest allowable daily discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. The daily discharge is calculated as the average measurement of the pollutant over the day.

Method Detection Level (MDL)--The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is above zero and is determined from analysis of a sample in a given matrix containing the analyte.

Pass-through— A discharge which exits the POTW into waters of the-State in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation), or which is a cause of a violation of State water quality standards.

pH—The pH of a liquid measures its acidity or alkalinity. A pH of 7 is defined as neutral and large variations above or below this value is considered harmful to most aquatic life.

POTW—Publicly Owned Treatment Works process “sanitary” wastewater for safe discharge.

Quantitation Level (QL)-- A calculated value five times the MDL (method detection level).

Slug Discharge—Any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge to the POTW. This may include any pollutant released at a flow rate which may cause interference with the POTW.

State Waters—Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

Stormwater—That portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a storm water drainage system, into a defined surface water body, or into a constructed infiltration facility.

Technology-based Effluent Limit—A permit limit that is based on the ability of a treatment method to reduce the pollutant.

Total Coliform Bacteria—A microbiological test which detects and enumerates the total coliform group of bacteria in water samples.

Total Dissolved Solids—That portion of total solids in water or wastewater that passes through a specific filter.

Total Suspended Solids (TSS)—Total suspended solids are the particulate material in an effluent. Large quantities of TSS discharged to receiving water may result in solids accumulation. Apart from any toxic effects attributable to substances leached out by water, suspended solids may kill fish, shellfish, and other aquatic organisms by causing abrasive injuries and by clogging the gills and respiratory passages of various aquatic fauna. Indirectly, suspended solids can screen out light and can promote and maintain the development of noxious conditions through oxygen depletion.

Water Quality-based Effluent Limit—A limit on the concentration of an effluent parameter that is intended to prevent the concentration of that parameter from exceeding its water quality criterion after it is discharged into receiving water.

APPENDIX C—RESPONSE TO COMMENTS

Comment 1:

The sampling point could be specified more clearly -- Rather than "effluent" as shown in the table on page 6, it may be more precise to describe the specific drain or receiving structure at a specific location at the GHP plant.

Response 1:

A footnote was added defining the effluent. The footnote reads: "The effluent is defined as the point of discharge into the GHP sewer system."

Comment 2:

The sample type could also be clarified. A 24-hour composite sample, while appropriate for many situations, is not as useful a requirement where wastes are hauled (unless there is a holding tank of sufficient volume to equalize the discharge out over the day). Unless such a feature is present, it may make sense to replace 24-hour compositing with the requirement to take a certain number of (four?) samples per load. For hauled wastes, many believe that sample aliquots should be taken at the very start and end of the discharge as well as mid-discharge where the homogeneity of the load is not assured. However, if loads are first mechanically mixed then fewer aliquots per load (maybe only one) could be used to provide representative data.

Response 2:

The wastewater from Ocean Protein is discharged directly into the GHP sewer system. The wastewater is not hauled. The discharge from Ocean Protein is collected into a 10,000 gallons tank where the pH is adjusted. The wastewater is pumped into a 2500 gallons tank that has two mixers. From there it is pumped to the Grays Harbor WWTP. The sampling point is between the 2500 gallon tank and the pump that transfers the wastewater to Grays Harbor system. It is my understanding that the flow is fairly constant. The wastewater will be piped and no truck will haul it. Grays Harbor Paper already has a certified laboratory and will be running the sample tests. The main reason that I specified the sampling frequency is that Grays Harbor Paper will need to control the dissolved oxygen in their aeration basin according to the load. With the mixing in the 2500 gallon tank, the 24 hr mechanical composite sampling would be appropriate.

Comment 3:

If 24-hour composites are not used, I would suggest the wording allow the samples to be lab composited proportionate to the flow volume they represent such that a single sample per day for BOD, TSS, or Ammonia is run. This is a lot cheaper than running multiple analyses per day, and is entirely defensible in many cases.

Response 3:

A 24 hour sampling composite was used. See the first bullet beneath the Table, Condition S2.A.

Comment 4:

We might wish to specifically allow the flow to be calculated based on the number of trucks multiplied by the volume per each tank truck delivering wastewater on each day.

Response 4:

The wastewater is discharged directly into the GHP sewer system.

Comment 5:

Given the proportion of loadings which this represents to the GHP system, it may be reasonable to allow the number of samples per week to be reduced to three per week (for BOD, TSS, NH3) after one year without violations of any permit limits so long as the days chosen are representative, including higher flow days and higher strength wastes. In this case, the permit might require the samples be collected on all days, but only run on the three days a week chosen by the GHP. Given that the loadings coming from facilities such as the OP facility are prone to be fairly variable, or at least have been pretty variable to date, I don't see how we could consider reducing sampling below 3/week until results show the loadings have stabilized.

Response 5:

The sampling frequency is kept since the Ocean Protein wastewater load is a significant portion of the GHP loading and GHP needs the testing data in order to know how to manage the air supply to their aeration basin.

Comment 6:

In Special Condition S9, it would seem to me to be reasonable and prudent to also require notification of Gray's Harbor Paper, and as a prerequisite to obtain GHP's prior concurrence before discharge of any non-routine or unanticipated nature. In such cases, an explanation of what caused the unanticipated discharge, and what steps might prevent the condition from recurring, might also be desirable.

Response 6:

Thanks. The following phrase (noted in bold type) has been added to the permit before Ecology gives authorization to discharge non-routine wastewater in S9: "The discharge cannot proceed until the Department has reviewed the information provided and has authorized the discharge. Authorization from the Department will be by letter to the Permittee or by an Administrative Order by the Department '**after consulting with Grays Harbor Paper, LP.**'"

Comment 7:

I received your 4/4/06 letter outlining the changes you are suggesting to correct an error in Special Condition S1 – Discharge limitations of the Ocean Protein proposed permit. The wording looks appropriate to me and I don't see any problems with it from the standpoint of Grays Harbor Paper.

Response 7:

Thanks, we added the language you suggested. See a copy of the April 4, 2006 letter, attached to this Response to Comments.



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
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TTY 711 or 800-833-6388 (For the Speech or Hearing Impaired)

April 4, 2006

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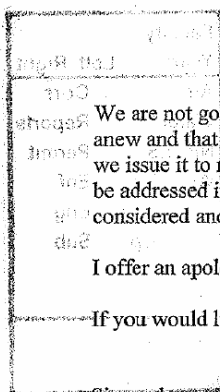
Dear Sirs:

Please be advised that there are technical errors in Special Condition S1 - Discharge limitations of the Ocean Protein proposed permit that was published on the Solid Waste and Financial Assistance/Industrial Section WEB site. During the review process of the Ocean Protein, LLC draft permit, the permit was being reviewed by more than one entity at a time in order to meet the time constraint. During this review process there were changes made in Special condition S1 defining "stickwater" and prohibiting its discharge into the Grays Harbor Paper's wastewater treatment system. Special condition S1 was not made current.

Special condition S1 in the proposed permit should have read:

1. The second paragraph should have been: "Beginning on the effective date and lasting through the expiration date of this permit, the Permittee is authorized to discharge all process wastewater from its fish meal processing plant except "stick water"* into the Grays Harbor Paper's LP (GHP) sewer system subject to the following limitations"
2. The footnote denoted by * should have been: "'Stick water" is the wastewater collected from the fish after being cooked, pressed, and processed through the tricanter and is usually evaporated. The solids are concentrated and added back to the fishmeal processing line. The permit requires Ocean Protein to collect and isolate the "stick water" and find an acceptable method of treatment and disposal. The permit does not authorize disposal of untreated "stick water" as defined above, or any other material, at sea.'

Facility: Ocean Protein	
Year:	Left Right
Air	Corr
Water	Reports
NPDES	Permit
WET-Tox	Enf
DWIRCRA	Eng
Clean Up	Sub
SW	
WP2	



We are not going to change the copy on the WEB since the clock for public input would start anew and that would delay the issuance of the permit. We will modify the propose permit before we issue it to reflect the changes above and any other comments we receive. These changes will be addressed in the response to comment part of the factsheet where all other comments are considered and the appropriate changes made to the proposed permit.

I offer an apology for the error.

If you would like to discuss this matter further, please contact me at (360) 407-6940.

Sincerely,

Don Nelson

Don Nelson
Industrial Section
Solid Waste and Financial Assistance